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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,591	01/18/2002	Ray Richards	3918-0136P	7115

2292 7590 01/28/2003

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EXAMINER

COLLINS, TIMOTHY D

ART UNIT	PAPER NUMBER
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3643

DATE MAILED: 01/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,591

Applicant(s)

RICHARDS, RAY

Examiner

Timothy D Collins

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 21-30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 is/are allowed.
- 6) ☐ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 17, 19, 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1, 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group II directed to a seaplane in Paper No. 5 is acknowledged.
2. Claims 21-30 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group I directed to a watercraft, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on 01/19/2001. It is noted, however, that applicant has not filed a certified copy of the Canadian application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of the phrase "wing is dihedral" is indefinite because it is unclear how a wing can be an angle. It appears that the applicant may

mean that the "wing has a positive dihedral", if this is the case it is suggested that the applicant use such terminology in claim 4.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5,8-10, and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by USPN 3,190,582 to Lippisch (hereinafter called 582).

- a. Re claim 1, 582 discloses the claimed invention at least in figure 4.
- b. Re claim 2, 582 discloses a horizontal stabilizer (44), adapted to maintain the fuselage above and out of the water.
- c. Re claim 3, 582 discloses that the main wing has a leading and trailing edge and the trailing edge is immovable relative to the main wing as seen in figure 4 at approximately just up from the 47.
- d. Re claim 4, 582 discloses that the wing has a positive dihedral in figure 4.
- e. Re claim 5, 582 discloses the claimed invention at least in figure 4.
- f. Re claim 8, 582 discloses that the propulsion means is located above the wing, in figure 4 at 41.

- g. Re claim 9, 582 discloses inherently that the seaplane has a center of gravity and a center of hydro-dynamic pressure. It also discloses inherently that the CG is located aft of the center of hydro-dynamic pressure, or else the aircraft would sink while attempting to hydroplane.
- h. Re claim 10, 582 also discloses inherently that the CG is located on the plane of symmetry and on or vertically above the main wing. This is because the CG is on the center line of the aircraft and the wing is on the bottom of the aircraft therefore the CG must be above the wing at some point along the wing.
- i. Re claim 16, 582 discloses that the horizontal stabilizer is above the water at the time of takeoff and landing as seen at least in figure 4.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6, 7, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 3,190,582 to Lippisch (hereinafter called 582) as applied above.

- j. Re claim 6, 582 may not specifically disclose that the wing has a dihedral angle of about 10 to about 20 degrees but it would have been obvious to make

the angle between 10 and 20 degrees for the purpose of greater hydroplaning efficiency and less drag while taking off.

k. Re claim 7, 582 may not specifically disclose that the wing has a dihedral angle of about 15 degrees but it would have been obvious to one of ordinary skill in the art to make the angle of about 15 degrees for the purpose of greater hydroplaning efficiency and less drag while taking off.

l. Re claims 11 and 12, 582 may not specifically disclose that the CG is spaced from the leading edge by half the width of the main wing or that it is at the trailing edge of the wing, however it would have been obvious to one of ordinary skill in the art to have placed the CG in any place that would result in the best performance, through routine testing and experimentation. The CG would be placed so as to allow for the best handling in the air as well as on the water.

m. Re claims 13-15, 582 may not specifically disclose that the horizontal stabilizer is two sections and that it has elevons on it which pivot independently up and down relative to the horizontal stabilizer, however elevons are old and well known in the art. Therefore it would have been obvious to one of ordinary skill in the art to have used elevons so as to increase the maneuverability of the aircraft as is common in fighter aircraft.

Allowable Subject Matter

10. Claims 17, 19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claim 18 is allowed.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following disclose seaplanes.

- n. USPN 3599903
- o. USPN 5065833
- p. USPN 4484721
- q. USPN 4962978
- r. USPN 5415365
- s. USPN 5622133
- t. USPN 1471656
- u. WO 95/00386

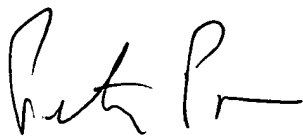
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy D Collins whose telephone number is 703-306-9160. The examiner can normally be reached on M-Th, 7:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 703-308-2574. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3597 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4180.

tdc
January 21, 2003


PETER POON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600